1 Interview Summaries

1.1 City of Portland (GIS Coordinator)

Interview Type	Personal, Municipality
Interview Location	Portland Department of Public Works
Interview Date	October 19, 2001
Summary Date	November 7, 2001
Interviewer	CDM / Michelle Thaler (thalerma@cdm.com)
Interviewed:	Jon Giles, GIS Coordinator, Department of Public Works, Engineering GIS Workgroup (jag@ci.portland.me.us) 55 Portland Street Portland, ME 04101 207-874-8842
Staff Size (approx)	3 full time GIS staff including a GIS Coordinator and 2 part time GIS staff
Budget (approx)	$80,000 – $120,000 GIS budget, includes salaries and mapping, Utility Enterprise funds cover $2,000 – $10,000 worth of aerial mapping; funds from a CSO Abatement program were also used to underwrite some GIS work – the annual "operating budget" for GIS beyond full-time staff salary is between $15,000 and $20,000
URL:	http://www.ci.portland.me.us

1.1.1 Overview

Portland's GIS Coordinator works for the Department of Public Works under the Engineering GIS workgroup

1.1.2 GIS Initiatives

1.1.2.1 Overview of GIS Utilization

The City of Portland has a GIS Coordinator that creates, maintains and uses GIS data on a daily basis. He creates and analyzes data for the DPW as well as other city departments. He also works closely with the planning department.

1.1.2.2 GIS Operating Environment and Infrastructure

- ESRI ArcCAD software
- ArcView 3.2
- ArcInfo 8.1
- Hardware includes an HP650 plotter, two older 24x36 digitizing tablets and PCs running Windows NT/2000. There is a LAN connecting PCs in the DPW building to the plotter.

1.1.2.3 GIS Data Resources and Requirements

1.1.2.3.1 Spatial Data

There are over 500 50-scale mylar maps dating back to 1882 showing the 35,000 parcels for Portland (including the islands). More than 76 parcels are created annually. Additionally the following paper maps also exist:

- General zoning
- Shoreland zoning
- Official street map
- Sewer
- Storm water
- Open space

Existing data sets include:

Basemap features:
Full planimetrics: Started in 1991 – most recent flyover in 2001
1 and 2 ft contours

Analysis layers include:
Parcels (29,000 automated in house and in the process of being updated. They were originally automated in 1999)
Zoning
Zoning overlay districts
Sewer system (data from Portland Water District – PWD)
Water distribution system (from PWD)
Storm water drain system (starting to gather data)
Protected open space and conservation lands
Trails, parks, bike paths and greenways
Voting Districts
Snowplow route maps
Maine DEA maps for drug free school zones
Hazardous waste sites (for the Casco Bay Estuary project)
Bathymetric contours from OGIS
Hydrography from aerials and OGIS
Habitats from OGIS
Census data
FEMA data

Currently unavailable but desired data sets include:
Updated data sets from OGIS
Utility data from CMP
Statewide standards for attributes for Landuse and zoning, or at least generalization rules, since all towns seem to have their own unique attribute codes
Addresses better assigned to state E911 data

1.1.2.3.2 Attribute Data

CAMA system is CLT universe. There is a plan to link this data to parcels but there is no live link.

The City uses the GeoTMS permitting system.

1.1.2.3.3 Data Issues

City data is in State Plane NAD83 feet while OGIS data is in UTM NAD83 meters. OGIS data is converted to StatePlane feet. Vertical datum used is NGVD29.

1.1.2.4 GIS Applications and Application Requirements

Planned future GIS activity and applications:

- Completion and updating of existing parcel GIS data layer development
- Data improvement and use of existing data for analysis including:
    - Better snow plough routing
    - School district mapping
    - Drug-free school zone analysis
    - Police patrol districts

1.1.3 Other Relevant Issues

- City has known, accurate Geodetic control points throughout the city. These points were used when the parcel data layer was developed. Parcel boundaries were automated with reference to the known points using GPS. GPS is used to collect point data such as sanitary sewer system data and storm drain point data.

- The basemap creation is 80% complete.

- A GIS Needs Assessment was done in-house

- The City of Portland would like to see more dense geodetic control for GPS. Many communities resort to rubber-sheeting data and this makes edge-matching datasets from neighboring communities difficult. It also makes overlaying statewide data difficult.

- The City of Portland would benefit from a statewide Digital Orthophoto program. Such a program should be undertaken in conjunction with educational efforts to teach towns the appropriate use of orthophotos and to show towns the benefits of GIS.

1.1.4 Major Benefits and Cost Justification

Towns and cities would benefit greatly from more GIS guidance from OGIS. This guidance should come in the form of educational programs and statewide standards that would ensure data quality. Additionally, OGIS should provide sample contracts or sample contract language that towns can use when procuring GIS services from a vendor. Sample RFPs would be extremely useful.

Currently, the DPW, Engineering and Planning departments use GIS on a weekly or daily basis. Other departments use GIS less than two times per month even though the City

GIS coordinator maintains many GIS datasets. These other departments lack the education to recognize that GIS could save them time and enable them to do additional analyses.